



TCAT WIFI VIDEO DRIVING RECORDER



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Operating Instruction Manual

## NOTICE!

This car Video Driving Recorder is designed to be used on +12V power supply system , not +24V power supply systems such as buses, trucks and other commercial vehicles.

## TCAT Driving Video Recorder –A97

### Product Specifications

Operating Voltage	DC 9-18V
Operating Current	250mA±10mA
Storage Medium	MicroSD card (up to 32GB max)
Sensor	Ov4685 4M CMOS
Lens	F1.8 Super large aperture 6pcs full glass HD lens
LCD screen	2.0 inch (960X240) HD TFT LCD screen
Audio	Built-in microphone /8Ω1W Speaker
VIDEO	Mp4 H.264
Audio Format	AAC
Photo Format	JPEG
Photo size	2560x1440( Highest resolution)
Video Record	1080P 30FPS
Operating Temperature	-20°C ~ 70°C
Operating Humidity	15~85%RH

## Features

Functions	Specifications
HD Recording	Up to 1290X1080P and 30FPS continuous recording and without any gaps in recording.
Snapshot function	Take a HD photo by the PHOTO key during the recording.
Audio Recording	Audio sound recording can be switched ON or OFF
Video Playback	Stored video files can be played back wirelessly via the mobile phone APP (A12) (Playstore or App Store) OR or playback after downloading from the microSD card.
WiFi Connection	Enable user to Set /Control/Realtime monitoring driving video via WiFi, supports playback/download.
WiFi Connection	Control/monitoring driving video via WiFi, supports playback/download
G-Sensor Emergency recording / Parking monitoring	G-Sensor Emergency recording / parking monitoring: When the car impacts an object or experiences a hard bump DURING DRIVING, it will trigger the G-sensor for emergency recording for 20 Seconds (per file). Similarly, when the car is bumped WHILE PARKING, it will also trigger the G-sensor for emergency recording for 20 Seconds (per file). NOTE: Perform DELETION of the emergency files once a month. Otherwise, the space in microSD card will be fully occupied.

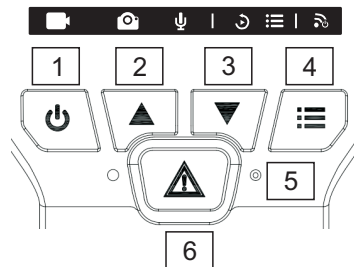
## Product instructions

### Light indications and Button Definitions



Product status indicated by red or blue light. Red light when power on / stop recording.  
Blue light flashing when recording, Red light flashing when without SD Card or something wrong with SD card. Red light when stop recording.

### Buttons Instructions



1. Power Switch: Short press to start /stop recording. Long press to power off. Short press to power on when in the Power Off mode. It is the Enter key when it in the Menu mode, it can start playing or stop playing in the Playback mode.
2. Up button: Short press to Capture picture when recording, it is the Up button in the Menu mode.
3. Down button: Short press to power on/off the MIC when recording, it is the Down button in the Menu mode. Press the down button to enter the file playback page without recording.
4. Menu: Short press to awaken/shut the back light of the screen when recording. Short press to set the menu and long press to turn on/off the WiFi when no recording.
5. Reset: Short press to reset/restart the device. Long press reset button for 6 seconds to restore the factory settings; press the power button & reset button at same time to restart the device.
6. SOS Lock : Short press to lock the current recording video for 1 minute. To unlock the file, enter the file playback list to manually unlock the files

## LED indicators

Recorder status is indicated by red or blue LED light.

Red light ON : Power is ON

Red Light OFF: No power

Red light Flashing : SD card not inserted or damaged.

Blue light flashing : Video is recording

Button Operation Instructions

 LED Indicate Light

 Reset

 Power

 snap the picture

 Audio/Video playback

Power Button

Short press to turn on/off recording function, press more than 2s to turn on/off the unit.

Up button

Short press to take HD pictures,

Reset Button

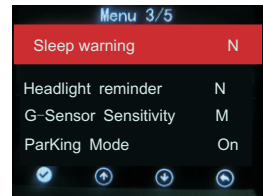
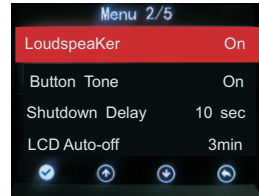
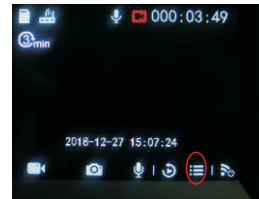
Press the power button & the reset button at same time to restart the unit.

Down button

Short press to power on/off the MIC when recording

## Driving Recorder Settings

When the recording is stopped, press the menu button to enter the local setting menu; press again to exit the menu and it will automatically start recording.



Video Quality: Set the video quality (Bit rate) and recorded file size to Low, Medium or High

Video Clip : Set the length of each recorded video clip, 1 Min, 3 Mins or 5 Mins.

Date/ Time: Set the system time of the recorder. Once connected to Smartphone App, the date and time will automatically be updated as well.

Audio When Recording : Set to whether record audio or not in the video clips.

Loudspeaker : Turn the speaker on or off. After turning off, the unit is in the silent working state, including the system warning and video playback.

Button Tone : Set Beep tone ON or OFF when the buttons is pressed.

Shutdown Delay: Set the delay to switch off the recorder after Engine is switched off.  
(No delay, 10 seconds, 30 seconds or 1 minute)

LCD Auto OFF : Set if the LCD should always remain ON, or auto OFF after a certain period of time.

OFF : LCD always ON

10 seconds, 30 seconds and 1 minute : LCD screen automatically turns off after the selected time.

Sleep warning : Set the fatigue driving reminder to turn on or off. After recording for 4 continuous hours, the recorder will prompt the driver to take a break from driving. The prompt will be audio warning and flashing of icon on the LCD.

Note: Icon flashing is not available if LCD is set to AUTO OFF.

Headlight Reminder : Set the switch on headlight reminder On /Off. When set to On, the recorder will prompt the driver to turn on the headlights when the camera detects that the environment is dark. The prompt will be audio warning and flashing of icon on the LCD.

Note: Icon flashing is not available if LCD is set to AUTO OFF.

G-sensor sensitivity : Set the collision sensitivity of the gravity sensor to lock the video clips.

Off: Do not lock any collision / event files

Low, Medium and High: Adjust the Sensitivity of the G-sensor

Parking Mode: Turn the Parking Mode On or OFF.

On: During parking (Engine OFF), the recorder can wake up to record a 20 s clip when the G sensor is triggered.

Off: Parking recording is disabled.

Parking Sensitivity: User can set the sensitivity of the Parking mode G sensor.

Note: Do not adjust until too sensitive, SD card will be full.

Language: Select the Language of the interface. (English / Chinese)

Format SD card : Format the memory card. It is recommended to format the SD card once a month to clear unwanted locked files.


Memory card information: View the current memory card capacity.

Restore Defaults: Restore all settings to original factory parameters

Dashcam information: Check the firmware version of the model, the date of the firmware , and the WIFI suffix of the machine.

## Function Instructions

### Recording Function

The recording function will automatically start when the vehicle is started. Turn on/off the recording function by pressing  button in the mobile APP. The blue light will flash when recording function is turned on.

### Overwriting the older files (Files cycling)

This recorder will start overwriting the existing files when the microSD card is full. It will overwrite the oldest files first. Example: Recording a 1920\*1080, 30fps video. This setting requires 90MB per minute. Hence, using an 8MB microSD Card, it will be full after 1.5 hour. Then, the oldest file shall be replaced with a newer video file.

### Emergency Recording

With the built-in G-sensor , any changes in acceleration can be detected by the recorder. When abnormal deceleration is detected (collision, braking , etc), the emergency recording function will be turned on. The emergency video file will be saved in the EVENT folder. The files in this folder will NOT BE OVERWRITTEN by normal recorded video. Hence, please delete the emergency files once a month to avoid reducing the storage space on the microSD card. You can delete the files via a computer or via the mobile app.

### Storage location of Normal recording video Files

All the normal recording video files will be stored in the DCIM folder under the microSD card root directory.

In order to minimize lost recording gaps in between video files, the recorder uses the short video file storage method, where every video file can be connected with the previous file or the next file.

### Camera Function

While recording, short press the camera button to snap a picture. The picture file name will be following the date and time when the picture istaken. Storage location is in the PICTURE folder in the microSD card root directory.

### Video Playback

To playback any saved video, stop the recording first. You can play the video via computer or via the mobile app.

### Audio Function

The unit can be set to record/do not record audio when recording. This setting can be turned ON/OFF via mobile app in the setting menu.

### WIFI Connection

The unit comes with a built-in WIFI module. Mobile phones & pads can connect to the unit via WIFI to playback files, delete files and perform settings.

## Install the mobile APP

Kindly scan below QR code to get the mobile app.

### Android APP



### IOS APP



## Turn on WIFI

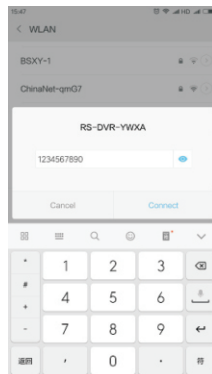
The WIFI will automatically turn ON when you start the car. Long press the camera button to turn ON/OFF the WIFI module. When WIFI is ON, the recorder will act as a WIFI hotspot. The WIFI SSID will be RS-DVR-(xxxx).

DEFAULT PASSWORD is 1234567890.

How to connect mobile phone to the recorder.

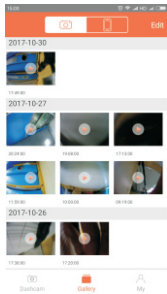
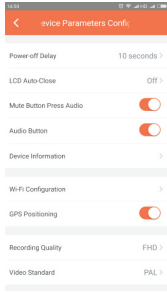
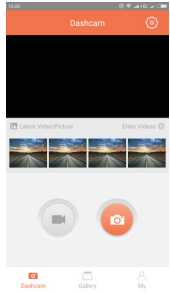
Ensure the recorder WIFI is ON, then, search for the recorder HOTSPOT from the mobile phone setting menu.

Example: RS-DVR-YWXA. Key in the default password 1234567890, the phone will be connected with the recorder.



## Mobile APP Connection


After the WIFI is connected, please start the installed APP TCAT DVR A97 to connect with the real-time control interface of the device.




## How to use the Mobile APP.

1.Start the TCAT DVR A97 on your mobile device.

2.Click to enter the Normal recording **Enter the routine recording** to check the video files on the recorder , select the file to playback; to preview the pictures or playback the videos. Simply click the bottom icon in the Normal recording.

3. Click the icon  to stop / start the recording.

4. Click the icon  to capture photos.

5. Click the album icon  to manage the files, which means the users could playback, download or share the files.

6. Click the icon  to do the settings management and check the version information of its APP.



**Power-off Delay:** Set the delay to switch off the recorder after Engine is switched off. (No delay, 10 seconds, 30 seconds or 1 minute)

**LCD Auto Close :** Set if the LCD should always remain ON, or auto OFF after a certain period of time.

**OFF :** LCD always ON

**10 seconds, 30 seconds and 1 minute :** LCD screen automatically turns off after the selected time.

**Mute Button Press Audio :** Set Beep tone ON or OFF when the buttons is pressed.

**Audio Button :** Turn the speaker on or off. After turning off, the unit is in the silent working state, including the system warning and video playback.

**Device information:** Check the firmware version of the model, the date of the firmware, and the WIFI suffix of the machine.

**WIFI Configuration:** Set the WIFI password.

**Recording Quality:** Set the video quality (Bit rate) and recorded file size to Low, Medium or High.

**Recording Length :** Set the length of each recorded video clip, 1 Min, 3 Mins or 5 Mins.

**Record Audio When Recording :** Set to whether record audio or not in the video clips.

**Overwrite:** Set ON to record over the older files (cyclic recording).

**Capture is linked with Video:** Not applicable

**Storage card information:** View the current memory card capacity.

**Formatting Storage card :** Format the memory card. It is recommended to format the SD card once a month to clear unwanted locked files.

**Driver Fatigue notification:** Set the fatigue driving reminder to turn on or off. After recording for 4 continuous hours, the recorder will prompt the driver to take a break from driving. The prompt will be audio warning and flashing of icon on the LCD.

**Note:** Icon flashing is not available if LCD is set to AUTO OFF.

**Open light Notification :** Set the switch on headlight reminder On /Off. When set to On, the recorder will prompt the driver to turn on the headlights when the camera detects that the environment is dark. The prompt will be audio warning and flashing of icon on the LCD.

**Note:** Icon flashing is not available if LCD is set to AUTO OFF.

**G-sensor sensitivity :** Set the collision sensitivity of the gravity sensor to lock the video clips.

**Off:** Do not lock any collision / event files

**Low, Medium and High:** Adjust the Sensitivity of the G-sensor

**Parking Monitoring:** Turn the Parking Mode On or OFF.

**On:** During parking (Engine OFF), the recorder can wake up to record a 20 s clip when the G sensor is triggered.

**Off:** Parking recording is disabled.

**Parking monitoring threshold:** User can set the sensitivity of the Parking mode G sensor.

**Note:** Do not adjust until too sensitive, SD card will be full.

**Restore Default Settings:** Restore all settings to original factory parameters

## Basic Trouble-shooting

Please try the following solutions when facing any issues.

Issue	Solution
Unable to connect to recorder via mobile APP	<ol style="list-style-type: none"> <li>①Start the Wi-Fi on the recorder;</li> <li>②Change "APP permissions" in setting on mobile phone;</li> <li>③Uninstall the APP and then reinstall again. Pay attention when the APP asks for permission notice.</li> </ol>
Cannot record video or audio	<ol style="list-style-type: none"> <li>①Ensure the microSD card is a Class 10 High speed card. Also, please reformat the card and try again.</li> <li>②Change the resolutions to lower setting.</li> <li>③Confirm the microSD is inserted correctly. Ensure the "click" sound is heard upon insertion.</li> <li>④Delete the old unused files on the memory card to clear up the memory space.</li> </ol>
Bad quality videos	<ol style="list-style-type: none"> <li>①Change the resolutions to higher setting.</li> <li>②Ensure protective film on camera lens is removed.</li> <li>③Ensure the camera lens and the windscreen is clean.</li> </ol>
Device works well but buttons not work	<ol style="list-style-type: none"> <li>①Press the RESET button with a needle to reset the factory default settings</li> <li>②Restart the device.</li> <li>③RESET the device. Take note when using the RESET button as this operation may lead to the loss of data. Eject the microSD card before resetting the recorder.</li> </ol>
Video noise or stuttering video playback on PC	Try to use another video software player to play the videos when the videos are not smooth. Try to use a better loudspeaker if there is any noise in the videos.
Video noise or stuttering video playback on mobile APP via WIFI	<ol style="list-style-type: none"> <li>①Ensure mobile phone is close to the recorder in order to have a strong WIFI connection.</li> <li>②Set and decrease the preview resolutions on mobile phone</li> <li>③Use a higher spec mobile phone (higher speed) to connect and playback the videos.</li> </ol>

## SD Card Storage Data Reference

Video recording Resolution	4GB Micro SD	8 GB Micro SD	16 GB Micro SD	32 GB Micro SD
1920 X1080(30fps)	34min	68min	136min	272min
Photo	2720 photos	5440 photos	10880 photos	21760 photos

### Notice:

The recorder can support the up to maximum 32GB MicroSD card. Please use a genuine microSD card to ensure the recording quality and reliability. Files maybe lost or damaged when using non-genuine (imitation cards). TCAT is not responsible for any case caused by usage of non-genuine micro SD card. Please ensure to use minimum speed of"CLASS 10" microSD cards.Never eject the memory card while recording. This will damage the card.

## Additional Information

Flashing of indicator light on the recorder:

1. The blue light starts flashing when the recording starts. This indicates normal operation status. If the red light is ON permanently, it means there is no memory card or the recorder cannot read the memory card.
2. If the red light is flashing quickly, or the blue light is flashing abnormally, or both red and blue light is permanently ON, this means the recorder hardware is faulty. In this case, try pressing the RESET button with a pin. If RESET does not work, try removing the car battery Negative terminal for 1 minute, and then reconnect it again.

Information about microSD card:

1. Because the emergency videos will NOT be overwritten, users are advised to delete the unused Emergency files once a month.
2. There may be too much memory fragmentation in the memory card due to constant writing and erasing activity. This will affect the recording of videos. In order to maintain best performance of the recorder, users are recommended to perform full FORMAT of the microSD card once a month.
3. Minimum speed class of microSD card is CLASS 10.
4. Supplied microSD cards have 1 (One) year Warranty from manufacturer against Manufacturing Defects Only. Warranty will be void if the manufacturer deems that the defect is caused by users or any other reasons.

## Warranty, Special Clauses and Exemptions

This product is used for video and audio recording. The recorded media shall be used ONLY as an additional reference in any case of accidents etc. TCAT shall not be held liable or responsible in any matter related to the use of the recorder in any situation or scenarios, whether directly or indirectly.

Take note of actions that may lead to loss of data as below:

1. Removing the memory card during recording. Any abnormal operations on the recorder may lead to damaged or loss of the video file.
2. Recorder and Video files maybe damaged or lost following the impact from a major car accident.

Other notices.

1. Please use the recorder while abiding the laws of your country, regarding rights in regards to using recording devices.
2. Please keep the user manual for future reference (default WIFI password).
3. Read the Usage terms and conditions clearly before usage of this device.
4. The recorder is directly connected with the vehicle power supply system. Please refrain from using the recorder for long periods of time with the engine is switched off. The car battery may be drained off and cause starting failures.
5. The operation temperature range of this product is -20°C~70°C. Do not use the recorder in any other locations other than a motor vehicle. DO NOT EXPOSE the recorder to any form of liquid or water. This recorder is NOT WEATHERPROOF and shall not be used outside a vehicle.
7. The recorder hardware has 3 (Three) year Warranty from manufacturer against Manufacturing Defects Only. Warranty will be void if the manufacturer deems that the defect is caused by users or any other reasons (such as water entry).